

ABSTRACT

5 Semiconductor substrates, particularly metallized substrates such as
partially processed wafers, are rinsed with an aqueous medium, preferably
deionized water, which further contains an anti-corrosive chemical agent or
agents selected so as to minimize corrosion of metals resulting from contact
with the water. The amount of anti-corrosive chemical agent is maintained in a
controlled manner at a predetermined level or within a predetermined range
10 preferably the rinsing with aqueous medium containing anticorrosive chemical
agent is also carried out for a specified time, followed by further rinsing with
deionized water alone. The rinsing may be combined, either in the same vessel
or in a different vessel, with a subsequent drying step, such as a drying process
utilizing a drying vapor introduced into the rinse tank or into a downstream
15 vessel. The drying vapor condenses on the surface of the semiconductor
material and reduces the surface tension of residual process fluid, causing the
residual process fluid to flow off the surface.